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Patience and Giving: Global Evidence Based on Longitudinal and Linguistic Data

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Abstract

Why do people engage in philanthropy? After merging aggregated Gallup World Poll data over the 2006 to 2022 period with data from the Global Preferences Survey, I demonstrate that, in countries with more patient populations, people are more likely to donate money, help a stranger, and volunteer their time. In within-country regressions based on the 1995-2022 European Values Study and World Values Survey data, I establish a positive link between saving behavior and charity membership. By employing the linguistic roots of post-industrial time preferences as an instrument, I verify that the effects of long-term orientation on giving can be interpreted as causal.

Keywords: charity, patience, philanthropy, saving, time preference

JEL classification codes: D03, D64

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1 Introduction

There is a long history of studies that establish links between preferences for self and for others. At first glance, it might be difficult to frame the concept of philanthropy within neoclassical economics as "[t]he selfish utility-maximizer cannot rationally make gifts without reward" (Halfpenny 1999, p. 199). Thus, it is not surprising that besides pure altruism, previous studies have suggested numerous factors that could motivate a decision to give. In addition to a "warm-glow" effect at the time of donation (Damgaard and Gravert 2017), the list of individual determinants of giving includes willingness to achieve psychological goals (Olson 1965), desire to avoid being the object of scorn and to receive social approval (Andreoni 1990), or an inclination towards equality and fairness (Fehr and Schmidt 1999). Most of these factors are inherently temporal and take time to materialize. Concurrently, transaction costs, which are generally immediate, and the high opportunity cost of time have been shown to discourage philanthropy (Knowles and Servatka 2015). Building on standard theories of giving, Damgaard and Gravert (2017) derive a stylized model with altruism and non-altruism utility terms, according to which a donor indeed decides to donate when faced with sufficiently low costs and an undistorted discount factor.[1] In this study, I examine whether the relationship between long-term orientation and different forms of giving holds between countries and individuals in contemporary times.

I test the generalizability of the experimental finding that time preferences are not specific to a certain domain, such that present bias in individual time preference negatively affects social behavior (Angerer et al. 2015; Rau 2021).[2] To correctly estimate the effects of patience, several caveats found in prior studies should be addressed. By bringing longitudinal dimensions with a rich set of fixed effects to the relationship between future-oriented behavior and giving, I take into account its non-homogeneity. In particular, naïve economic agents who do not foresee self-control problems are likely to donate less than subjects who are more sophisticated (O'Donoghue and Rabin 1999). The differences in giving patterns between individuals with standard and present-biased time preferences observed at a particular period can also be affected by procrastination. More specifically, "... [present-biased] people find reasons to put off doing onerous tasks that generate immediate costs and future rewards" (Knowles and Servatka 2015, p. 56). In addition

[1] According to this model, in the case of present-biased preferences, there is a wedge between current and future utility that eventually leads to fewer donations. From the perspective of a current self, the threshold value that equalizes the costs and benefits of donating, and below which donating is optimal is not affected. Concurrently, for a future self, future benefits are discounted, while current costs are taken as given.

[2] This dilemma remains unresolved because, according to another strand of experimental literature, patience is domain-specific (Güth et al. 2008; Kölle and Wenner 2021).

to psychological channels, patience possibly affects giving via general development. As described in Sunde et al. (2022), patience determines the development prospects of nations not only via saving and education decisions, but also via equilibrium effects and human capital externalities. Therefore, I estimate the giving effects of patience in within- and cross-country settings. Apart from monetary donations, global giving surveys query subjects about helping a stranger and volunteering time to a charity (CAF 2019). Because the non-monetary dimension of generosity involves more interaction and cooperation, it may be associated with the expectation of fewer abstract benefits, based on the notion of reciprocal altruism and indirect reciprocity (Trivers 1971). To examine general philanthropic behavior rather than the capacity to give, I employ a multidimensional giving index.

Significant cross-country differences in charitable giving, termed a puzzle by Cai et al. (2022), highlight the importance of identifying the deep determinants of giving patterns.[3] Although microeconomic literature has seen an increase in the number of studies focusing on charitable giving in field-experiment settings (Jasper and Samek 2015), there is a lack of studies investigating this topic at the global level. This can be explained by the difficulties of finding exogenous variation in the aggregate determinants of giving. By combining the theory that certain languages, such as English, "grammatically associate the future and the present" (Chen 2013) with the theory on diffusion of cultural traits conducive to future orientation from global technological frontiers (Özak 2018), I propose to instrument patience by linguistic proximity to the UK. Because I find that patience and monetary and non-monetary giving are positively associated, I reinforce the correlation results of Falk et al. (2018) on economic preferences and provide more precise estimates for the effects of long-term orientation on giving. I also contribute to the literature on social preferences by showing that the magnitude of giving elasticity is not considerably affected by the level of aggregation or the choice of observed or survey treatment measures.

2 Data and variables

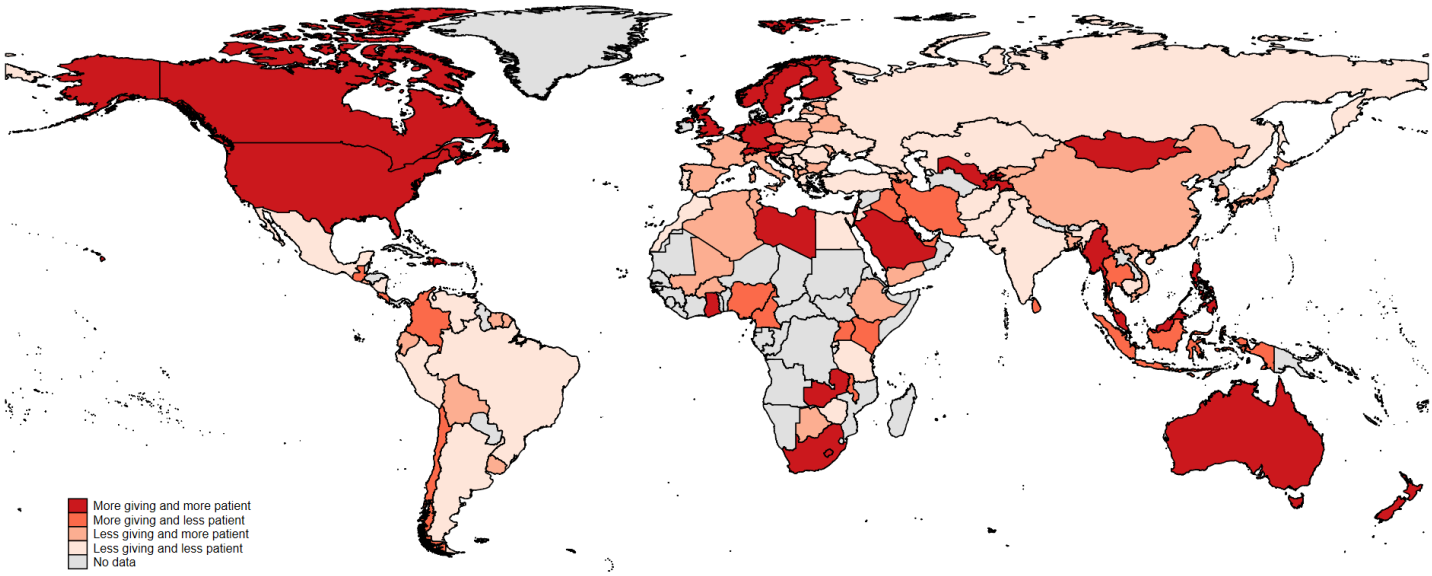
To capture global trends in charitable giving and time preferences, I consider several data sources. In line with the CAF (2019)'s methodology, I construct the World Giving Index (WGI) for the 2006-2022 period based on World Gallup Polls.[4] This index measures charitable giving at the

[3]To illustrate, in the UK, 71% of the population typically donate money monthly, while in Georgia, only 7% do so (CAF 2019). Similarly, recent estimates of people helping strangers reach as high as 77% for Liberia and as low as 24% for Japan, while participation in volunteering across the globe varies between 5% (China) and 46% (Sri Lanka).

[4]As a robustness test, I also consider restricting the WGI data to the 2012-2022 period.

extensive margin over the month preceding the interview across three dimensions: donating money, helping strangers, and volunteering time. The main treatment variable is the cross-sectional survey measure of patience. It is based on the 2012 Global Preferences Survey data and comprises two components, one with a quantitative (intertemporal choice questions using a staircase method) and the other with a qualitative (self-assessment) format (Falk et al. 2018). As alternative outcome and treatment variables, I propose two binary variables based on the 1995-2022 European Values Study and World Values Survey data. The former captures membership or belonging to a charitable or humanitarian organization, while the latter indicates whether a respondent's family saved money during the prior year. In Figure 1, I combine giving and patience variables and illustrate their distributions across 119 countries.

Figure 1: Distribution of giving and patience across the world



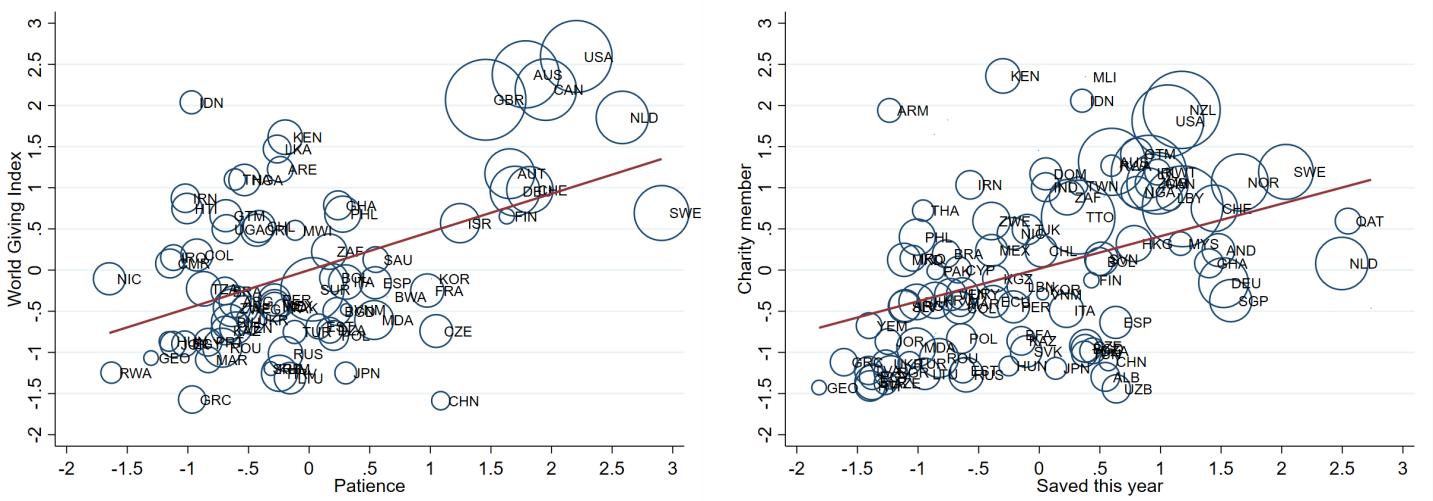
Note: the figure depicts a heat map created using combined measures of giving and patience.

Figure 2 reveals unconditional correlation patterns between patience and giving: it is positive with a rather steep slope and driven by linguistic distance to the UK.[5] The latter is a 0–1 index based on common official and native languages and linguistic proximity, constructed using the methodology and bilateral country-level data of Melitz and Toubal (2014). I chose these variables as a base for the instrument because they can be merged into "an index resting strictly on exogenous linguistic factors" and thus, should be less affected by contemporary economic

[5]Table A1 presents inter-linkages between these variables in a 3SLS framework.

factors (Melitz and Toubal 2014, p. 358).[6]

Figure 2: Giving, patience, and linguistic distance to the UK



Note: the figure depicts unconditional standardized linear prediction plots weighted by the linguistic proximity to the UK.

3 Empirical strategy

To explore the relationship between patience and charitable giving, I first combine the dyadic regression frameworks of Adserà and Pytliková (2015) with those of Becker et al. (2020), and regress the absolute difference in giving on the absolute difference in patience in the sample of country pairs. The basis of this specification are inclusion of country and time fixed effects to eliminate different types of unobservables that make people more patient and more likely to engage in philanthropic endeavours:

$$|Giving_i - Giving_j| = \alpha_1 + \sigma_1|Patience_i - Patience_j| + X'_{ij}\theta + \gamma_i F_{ij} + \gamma_t F_t + \epsilon_{ij}, \qquad (1)$$

where $Giving_i$ and $Giving_j$ and $Patience_i$ and $Patience_j$ represent the levels of giving and patience in countries i and j; X_{ij} comprises the set of time-varying controls; F_{ij} and F_t indicate country-pair and year fixed effects.[7]

To further examine the direction of the relationship between giving and patience, I consider a series of standard cross-sectional regressions. In these estimations, the initial set of controls are the deep determinants of development, legal origins, the degree of fractionalization and adherence to religion, and other economic preferences; I then include a variety of contemporary socio-economic variables, motivated by Cai et al. (2022) and Sunde et al. (2022):

[6] Tables A1 - A4 provide detailed descriptive statistics for the data used.
[7] Given the level of estimation, standard errors are clustered at the country-pair level.

$$Giving_i = \alpha_1 + \sigma_1 Patience_i + X'_{i,r}\theta + \epsilon_i, \tag{2}$$

where $Giving_i$ and $Patience_i$ are standardized measures of charitable giving and patience for country i, and $X_{i,r}$ is a vector of controls at the country and region level.[8]

To account for more granular unobservables and the non-continuous nature of giving decisions, I consider the methodology of Chen (2013), based on the standard results of Chamberlain (1980). In this specification, I condition the effects of long-term orientation and compare the giving patterns of individuals only with that of others who are identical to them across a variety of dimensions:

$$Pr(Charity\ membership_{it}) = \frac{exp(\sigma_1 Save_{it} + X'_{it}\theta + \gamma_i(F^c_{it} \times F^{en}_{it} \times F^{ex}_{it}))}{1 + exp(\sigma_1 Save_{it} + X'_{it}\theta + \gamma_i(F^c_{it} \times F^{en}_{it} \times F^{ex}_{it}))}, \tag{3}$$

where $Charity\ membership_{it}$ and $Save_{it}$ are binary proxies of giving and patience for individual i surveyed in year t. $X_{i,t}$ captures individual characteristics. F^c_{it}, F^{ex}_{it}, and F^{en}_{it} are the set of country-period, exogenous (e.g., age), and endogenous (e.g., education) fixed effects.[9]

Lastly, I instrument patience with linguistic distance to the UK. I consider this instrument relevant based mainly on the hypothesis that contemporaneous economic traits were diffused from or affected by the distance to pre-industrial technological frontiers. As suggested by Özak (2018), countries located closer to the UK developed "... a culture conducive to innovation, knowledge creation, and entrepreneurship" (p. 175), with long-term orientation being a major force behind this transformation (Möhrle and Sunde 2021). To satisfy the exclusion restriction, the linguistic channel should have transmitted patience without inducing an independent effect on philanthropy. This is expected to hold in regions where the post-industrial culture of patience was initially transmitted, while the culture of giving was nourished later. However, by its construction, the instrument may also capture other traits that potentially determine contemporaneous charitable giving. I hypothesize that the direct cultural transmission channel is mainly driven by geographical proximity and migration and thus, control for these effects.[10] Concurrently, the grammatical structure of English (Chen 2013) and heterogeneity in the dis-

[8] I initially cluster standard errors at the country level. I also consider clustering at the higher level of aggregation and the standard spatial correction procedure. For the former, I combine the World Bank income classification with the regional aggregation of Sunde et al. (2022), while the latter is based on Colella et al. (2019).

[9] Since only repeated cross-sectional data are available, I cluster standard errors at the country level.

[10] I control for the effects of ancestral distance as in Becker et al. (2020), pre-industrial time required to reach the UK and China as in Möhrle and Sunde (2021), % of population of European descent as in Sunde et al. (2022), blood (the frequency of types A and B) distance relative to the UK as in Gorodnichenko and Roland (2017), and exclude immigrants from the sample as in Chen (2013).

tribution of local languages across the world (Adserà and Pytliková 2015) should support the exclusion restriction.[11] Finally, I address the incidental effects of patience on giving, mainly via wealth, by estimating IV regressions at the individual, dyadic, and country levels with respective socio-economic controls.

4 Results

The first two columns of Table 1[12] present the results of dyadic regressions based on the yearly Gallup data. Differences in patience per se explains nearly 5% of annual variations in the WGI. When I include fixed effects and the set of controls, the estimate remains stable, but the magnitude of its effects shrinks from 0.22 to 0.14 standard deviations. Even with the shrinkage, the giving effects of patience are larger than the combined effect of other economic preferences, differences in economic development, and ancestral distance between countries.

Table 1: Patience and giving: cross-country evidence

	(1) |ΔWGI|	(2) |ΔWGI|	(3) WGI	(4) WGI
|ΔPatience|	0.22***	0.14**		
	(0.07)	(0.05)		
Patience			0.46***	0.56**
			(0.11)	(0.24)
|ΔHDI|		-0.01		
		(0.02)		
HDI				0.92**
				(0.36)
Ancestral distance		0.05**		
		(0.02)		
Genetic diversity				0.01
				(0.17)
|Δ∑(Intended altruism, Reciprocities, Risk, Trust)/5|		0.09*		
		(0.05)		
Trust				0.22**
				(0.10)
Negative reciprocity				-0.22*
				(0.11)
Country-pair FE	No	Yes	No	No
Year FE	No	Yes	No	No
Additional controls	No	No	No	Yes
R^2	0.05	0.29	0.23	0.88
Observations	40,620	40,620	76	71
Country pairs	2,850	2,850	n/a	n/a
Countries	76	76	76	71

Note: the table presents the results of standardized dyadic and aggregated regressions. For the former, standard errors are two-way clustered at country pairs; while for the latter, they are clustered at the country level. Additional controls account for geography, socio-economic situation, legal and ethnic origins, adherence to religion, fractionalization, and other preferences. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

To further explore the association between patience and charitable giving at the country level, I aggregate the Gallup data and estimate Equation 2 in Columns (3) and (4) of Table

[11] To further ensure the exclusion restriction, I consider another transmission source, linguistic distance to Sweden (the most patient country in the sample) and use the standard over-identifying restriction test.

[12] Complete and variable-by-variable regression results can be found in Tables A6, A7, and A8.

1. According to the full specification, which includes 43 controls in addition to the patience measure, a one standard deviation increase in patience is approximately associated with a one-half standard deviation increase in the WGI. Compared to dyadic regressions, the individual explanatory power of patience is much larger in standard OLS estimations, but its relative effect is less pronounced.

Table 2 presents the results of individual-level Logistic estimations. As shown in Column (1), the unconditional relationship between saving and giving behavior in the global sample of more than 300,000 individuals is positive and highly significant. As I add fixed effects and controls in Column (7), the sample shrinks to 8,607 individuals, but its composition becomes more homogeneous. It includes individuals living in the same country and period of time who are comparable across socio-economic characteristics but who save and give differently. Even after conditioning, the within-country variations in saving patterns are large enough to generate differences in giving behavior between comparable subjects. This change is equivalent to an 18% increase in the odds of giving.

Table 2: Patience and giving: within-country evidence

	(1) Charity member	(2) Charity member	(3) Charity member	(4) Charity member	(5) Charity member	(6) Charity member	(7) Charity member
Saved this year	1.44***	1.27***	1.28***	1.11***	1.17***	1.19***	1.18**
	(0.10)	(0.03)	(0.03)	(0.03)	(0.06)	(0.07)	(0.09)
General trust							1.33***
							(0.08)
Trusts charitable organizations							1.49***
							(0.09)
Teaches saving to children							0.94
							(0.06)
Unemployed							0.83**
							(0.07)
Mother is immigrant							1.15
							(0.20)
Father is immigrant							1.33*
							(0.21)
Country × Year-Wave FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Age × Sex FE	No	No	Yes	Yes	Yes	Yes	Yes
Income × Education FE	No	No	No	Yes	Yes	Yes	Yes
Marital status × N. of children FE	No	No	No	No	Yes	Yes	Yes
Religion × Family importance FE	No	No	No	No	No	Yes	Yes
All FEs Interacted	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	305,898	305,898	291,712	75,407	26,775	14,256	8,607
Countries	103	103	103	90	88	88	71

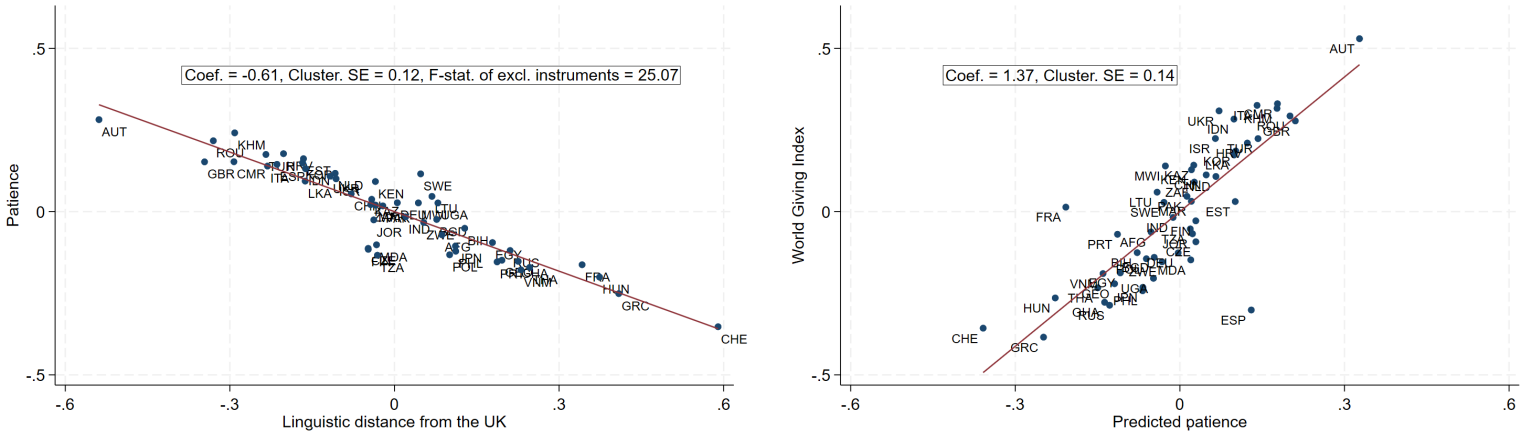
Note: the table presents the results of fixed-effect Logistic regressions with coefficients reported as odds ratios and standard errors clustered at the country level. Immigrants are excluded from all regressions. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table 3 presents the results of instrumenting patience in different settings.[13] The first-stage and reduced-form estimations are in line with the assumption that linguistic distance to the UK is

[13]They are fundamentally cross-country in nature, as the instrument only varies at the country level. Thus, in Appendix, I provide several additional robustness tests of the main (Gallup-based) specification. It is robust to the choice of instrument, functional form, and standard errors. The results also remain qualitatively unaltered when I control for the effects of numerous controls and account for outliers.

positively associated with patience and giving. However, the predicted power of the instrument is not sufficiently strong, and I report the Anderson-Rubin statistic to demonstrate that the instrument relevance is not an issue. To illustrate the relevance of the instrument, in Figure 3, I present reversed added-variable plots based on the most restrictive first- and second-stage estimations.[14]

Figure 3: Linguistic distance from the UK, predicted patience, and giving



Note: the figure depicts standardized added-variable plots based on first- and second-stage regression estimations.

The second-stage results in Table 3 indicate that patience is positively associated with charitable giving, and the magnitude of its treatment effects is closer to one standard deviation than to one-half. As in Cai et al. (2022) with individualism, the IV estimates are greater than the OLS estimates.[15] Because the difference between specifications varies and becomes smaller with controls, I assume that OLS estimates are affected by omitted variable and simultaneity biases.[16] It is less likely that the difference is caused by the violation of monotonicity (as the effects of the distance to the UK effects are comparable between the individual and aggregated samples) or measurement error (as I consider both actual and hypothetical patience proxies).

[14]In this specification, I consider only Gallup-based data and control for the effects of time that was required to reach the UK and China before the widespread use of steam power, % of population of European descent, and blood (the frequency of types A and B) distance relative to the UK. Because data is unavailable for the additional controls, the sample size further shrinks to 51 countries and does not include 3 other English-speaking countries (Australia, Canada, and the USA) that were former UK colonies and which are more patient than the UK. The regression coefficients are presented in Appendix Table A9. Using this specification, I also find positive treatment effects of patience on the disaggregated dimensions of the WGI index, with the most notable changes observed for monetary giving.

[15]However, unlike Sunde et al. (2022), the magnitude of the patience elasticity does not significantly increase with the level of aggregation, indicating possible differences between economic development and social effects of patience.

[16]More specifically, I assume that the bias in OLS estimates is mainly caused by unobserved factors that make people more (or less) patient and can also make them more (or less) likely to engage in philanthropic endeavours.

Table 3: Patience and giving: instrumental variable design

	(1)	(2)	(3)	(4)	(5)	(6)
	|ΔPatience|	|ΔPatience|	Patience	Patience	Saved this year	Saved this year
First stage:						
|ΔLinguistic distance to the UK|	0.54***	0.71***				
	(0.11)	(0.10)				
Linguistic distance to the UK			0.59***	0.33***	0.14***	0.08***
			(0.13)	(0.07)	(0.03)	(0.03)
	|ΔWGI|	|ΔWGI|	WGI	WGI	Charity member	Charity member
Second stage:						
|ΔPatience|	0.70***	0.63***				
	(0.14)	(0.14)				
Patience			0.98***	0.92***		
			(0.15)	(0.28)		
Saved this year					0.97***	1.06**
					(0.24)	(0.45)
Reduced-form regressions:						
|ΔLinguistic distance to the UK|	0.38***	0.45***				
	(0.06)	(0.09)				
Linguistic distance to the UK			0.58***	0.30*	0.14***	0.09***
			(0.10)	(0.17)	(0.02)	(0.02)
Standard OLS regressions:						
|ΔPatience|	0.22***	0.15***				
	(0.07)	(0.06)				
Patience			0.46***	0.55**		
			(0.11)	(0.26)		
Saved this year					0.07***	0.03***
					(0.01)	(0.01)
Controls and FE	No	As in Table 1's (2)	No	As in Table 1's (4)	No	Sim. to Table 2's (7)
First stage F-statistic	22.36	51.35	22.49	19.40	30.53	7.64
Montiel Olea and Pflueger test, F-crit. for 10% bias, 10% CI	19.75	19.75	19.75	19.75	19.75	19.75
Anderson–Rubin test, p-value	0.01	0.08	0.01	0.02	0.01	0.03
Observations	38,698	38,698	74	70	293,070	63,549
Countries	74	74	74	70	95	69

Note: the table presents standardized OLS and IV estimates with clustered standard errors. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

5 Concluding remarks

Existing differences in generosity between nations, which cannot be explained solely by their economic development, highlight the importance of identifying the deep determinants of global giving patterns. Using several empirical specifications, I demonstrate that contemporaneous levels of patience are positively associated with philanthropic endeavours within and between countries. This study also sheds light on one possible reason for the notable cross-country variation in the long-term orientation of countries, linguistic distance to the UK, and demonstrates how this link can be used to explore the consequences of individual and societal impatience.

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Appendices

Table A1: Descriptive statistics - I (EVS and WVS combined)

Description	Obs.	Mean (St. Dev.)	Period	Source
Outcome and treatment variables:				
Charity member (1 if belongs to or active/inactive member of a charitable or humanitarian organization)	305,898	0.163 (0.369)	1995-2022	[Che13; EVS22; Hae+22]
Saved (1 if family saved money during the past year)	305,898	0.267 (0.442)	1995-2022	[Che13; EVS22; Hae+22]
Controls:				
General trust (1 if most people can be trusted)	295,620	0.247 (0.431)	1995-2022	[Che13; EVS22; Hae+22]
Trusts charity (1 if confident in charitable or humanitarian organizations)	225,260	0.619 (0.486)	1995-2022	[Che13; EVS22; Hae+22]
Unemployed (1 if yes)	305,898	0.088 (0.283)	1995-2022	[Che13; EVS22; Hae+22]
Teaches saving (1 if children should be encouraged to learn thrift and saving money and things at home)	295,620	0.247 (0.431)	1995-2022	[Che13; EVS22; Hae+22]
Mother is immigrant (1 if yes)	218,180	0.084 (0.277)	1995-2022	[Che13; EVS22; Hae+22]
Father is immigrant (1 if yes)	217,871	0.085 (0.279)	1995-2022	[Che13; EVS22; Hae+22]
Fixed effects:				
Sex: female, male	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Age: 9 ten-year bins from 10-20 years	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Countries: 103	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Years: 22 and waves: 5	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Income level: 11 categories from low to high	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Highest education level achieved: 8 categories from low to high	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Marital status: divorced, living together, married, separated, single, widowed	n/a		1995-2022	[Che13; EVS22; Hae+22]
Number of children: 9 categories from no child to 8 or more children	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Family importance: not at all important, not very important, rather important, very important	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Religious denomination: does not belong, Buddhist, Roman Catholic, Hindu, Jew, Muslim, Orthodox, Protestant, other Christian, other	n/a	n/a	1995-2022	[Che13; EVS22; Hae+22]
Instrument: linguistic distance to [from] the UK	293,070	0.197 [0.803] (0.198)	n/a	[MT14]

Table A2: Descriptive statistics - II (dyadic sample)

Description	Obs.	Mean (St. Dev.)	Period	Source
Outcome and treatment variables:				
Absolute difference in World Giving Index (average of helping strangers, donating money, and volunteering time), unstandardized version	40,620	0.120 (0.093)	2006-2022	[Gala]
Absolute difference in patience (weighted average of quantitative and qualitative time preference measures), unstandardized version	40,620	0.405 (0.329)	2012	[Fal+16; Fal+18; Sun+22]
Controls:				
Absolute difference in Human Development Index, unstandardized version	40,620	0.166 (0.121)	2006-2022	[UND]
Average of absolute differences in altruism, risk, risk, positive and negative reciprocity, and trust, each sub-component is standardized	40,620	0.000 (0.492)	2012	[Fal+16; Fal+18; Sun+22]
Ancestral distance, standardized at the dyadic level	40,620	-0.008 (1.016)	n/a	[BEF20]
Instrument: absolute difference in linguistic distance to/from the UK, unstandardized version	38,698	0.146 (0.193)	n/a	[MT14]

Table A3: Descriptive statistics - III (cross-country sample, unstandardized)

Description	Obs.	Mean (St. Dev.)	Period	Source
Outcome and treatment variables:				
World Giving Index, defined in Table A2	76	0.332 (0.092)	2006-2022	[Gala]
Help strangers, % of sample	76	0.495 (0.104)	2006-2022	[Gala]
Donate money, % of sample	76	0.304 (0.162)	2006-2022	[Gala]
Volunteer time, % of sample	76	0.196 (0.092)	2006-2022	[Gala]
Patience, defined in Table A2	76	-0.003 (0.370)	2012	[Fal+16; Fal+18; Sun+22]
Region indicators:				
1 if East Asia and Pacific	76	0.118 (0.325)	n/a	[Sun+22]
1 if Europe and Central Asia	76	0.355 (0.482)	n/a	[Sun+22]
1 if Latin America and Caribbean	76	0.171 (0.379)	n/a	[Sun+22]
1 if Middle East and North Africa	76	0.118 (0.325)	n/a	[Sun+22]
1 if North America	76	0.026 (0.161)	n/a	[Sun+22]
1 if South Asia	76	0.066 (0.250)	n/a	[Sun+22]
1 if Sub-Saharan Africa	76	0.145 (0.354)	n/a	[Sun+22]
Geographic controls:				
Arable land, % of land area	76	19.144 (15.094)	1995-2015	[Wora]
log(Area)	75	12.850 (1.599)	n/a	[MZ11]
Average precipitation	75	84.989 (58.112)	1961-1990	[Nor06]
Average temperature	75	16.395 (8.528)	1961-1990	[Nor06]
Distance to equator	76	30.806 (16.860)	n/a	[MZ11]
Index of the suitability of land for agriculture	75	0.405 (0.244)	1961-1990	[Mic12]
Longitude	76	19.138 (58.494)	n/a	[MZ11]
% of area in (sub-)tropical zones	75	31.923 (41.330)	n/a	[Galb]
% of population at risk of malaria	75	20.503 (35.054)	1994	[AG13]
Legal origins:				
1 if France	75	0.413 (0.496)	n/a	[La 99]
1 if German	75	0.067(0.251)	n/a	[La 99]
1 if Scandinavian	75	0.027 (0.162)	n/a	[La 99]
1 if Socialist (Soviet)	75	0.213 (0.412)	n/a	[La 99]
1 if UK	75	0.280 (0.452)	n/a	[La 99]
Adherence to religion shares:				
Atheists	76	7.986 (10.790)	2000	[Bar]
Buddhists	76	5.014 (17.585)	2000	[Bar]
Catholics	76	31.375 (34.840)	2000	[Bar]
Hinduists	76	1.895 (9.201)	2000	[Bar]
Muslims	76	20.767 (33.601)	2000	[Bar]
Protestants	76	10.778 (16.154)	2000	[Bar]
Fractionalization variables:				
Ethnic	75	0.409 (0.248)	2001	[Ale+19]
Linguistic	75	0.364 (0.280)	2001	[Ale+19]
Religious	75	0.434 (0.239)	1997-2001	[Ale+19]
Genetic variation:				
% of the population of European descent	74	43.008 (44.303)	1500-2000	[Sun+22]
Predicted genetic diversity	74	0.724 (0.029)	n/a	[AG13]
Other preferences:				
Intended altruism	76	-0.038 (0.343)	2012	[Fal+16; Fal+18]
Trust	76	-0.022 (0.278)	2012	[Fal+16; Fal+18]
Risk	76	0.013 (0.302)	2012	[Fal+16; Fal+18]
Negative reciprocity	76	0.013 (0.275)	2012	[Fal+16; Fal+18]
Positive reciprocity	76	-0.034 (0.342)	2012	[Fal+16; Fal+18]
Socio-economic indicators:				
log(GDP per capita), constant 2010 $	76	8.665 (1.445)	1995-2015	[Wora]
Human development index	76	0.705 (0.146)	1995-2015	[UND]
Globalization index	76	62.159 (14.193)	1995-2015	[Gyg+19]
Gross national savings, % of GDP	75	22.447 (9.771)	1995-2015	[Wora]
Government final consumption, % of GDP	76	15.672 (4.925)	1995-2015	[Wora]

Table A4: Descriptive statistics - IV (cross-country sample continued, unstandardized)

Description	Obs.	Mean (St. Dev.)	Period	Source
log(Total population)	76	16.995 (1.423)	1995-2015	[Wora]
Electoral democracy index	76	0.591 (0.258)	1995-2015	[Var]
Corruption perceptions index	76	43.451 (21.117)	1995-2015	[Tra]
Gini index	76	38.599 (8.309)	1995-2015	[Sol20]
Intentional homicides per 100,000 people	76	7.187 (10.167)	1995-2015	[Wora]
Instrumental variables:				
Linguistic distance to [from] the UK	74	0.183 [0.816] (0.176)	n/a	[MT14]
Linguistic distance to [from] Sweden	74	0.151 [0.849] (0.153)	n/a	[MT14]
Additional controls for the instrumental variable estimations:				
Time required to reach the UK before the widespread use of steam power (pre-industrial period)	54	5.168 (3.837)	1800	[Öza18]
Blood (the freq. of A and B types) distance to the UK	75	1.615 (0.876)	Mostly 1940s and 1950s	[GR17]
Pre-industrial time required to reach China	54	7.081 (2.756)	1800	[Öza18]
Country classification used for clusters:				
1 if Low income	76	0.053 (0.225)	2019-2021	[Worb]
1 if Lower middle income	76	0.289 (0.457)	2019-2021	[Worb]
1 if Upper middle income	76	0.289 (0.457)	2019-2021	[Worb]
1 if High income	76	0.368 (0.486)	2019-2021	[Worb]
Additional controls I:				
Power distance	48	59.063 (20.834)	2010	[Hof15]
Individualism/collectivism	48	44.479 (24.069)	2010	[Hof15]
Masculinity/femininity	48	49.417 (18.599)	2010	[Hof15]
Uncertainty avoidance	48	71.167 (20.687)	2010	[Hof15]
Long/short-term orientation	61	44.754 (23.973)	2010	[Hof15]
Indulgence/restraint	60	43.933 (22.282)	2010	[Hof15]
Traditional versus secular-rational values	67	-0.250 (0.898)	2017-2022	[Worc]
Survival values versus self-expression values	67	0.111 (1.176)	2017-2022	[Worc]
Additional controls II:				
Property rights factor scores	74	48.581 (24.628)	1995-2015	[QoG]
Index of economic freedom	75	60.217 (10.297)	1995-2015	[Her]
Subjective institutional quality	59	48.877 (14.176)	2012	[Sun+22]
Adjusted net national savings, % of GNI	74	9.867 (10.140)	1995-2015	[Wora]
Subsidies and other transfers, % of expense	69	45.219 (16.549)	1995-2015	[Wora]
Government expenditure on education, % of GDP	71	4.441 (1.481)	1995-2015	[Wora]
Public health expenditure, % of GDP	76	3.817 (2.021)	1995-2014	[Wora]
Additional controls III:				
log(Lights/area)	75	0.322 (1.565)	1994–2014	[HSW12]
log(Population, ages 65+)	76	14.360 (1.539)	1995-2015	[Wora]
Happiness score	61	1.925 (0.244)	1994–2014	[Ing+14]
Math and science test scores	49	4.476 (0.609)	1960–2000	[HW12]
GDP deflator, annual %	76	9.398 (9.045)	1995-2015	[Wora]
Deposit interest rate, %	65	9.043 (8.751)	1995-2015	[Wora]
Individuals using the Internet, % of population	76	25.015 (19.077)	1995-2015	[Wora]
Additional controls IV:				
log(GDP per capita 1950), constant 2011 $	64	7.888 (0.920)	1950	[BvZ20]
log(GDP per capita 1975), constant 2011 $	69	8.623 (1.055)	1975	[BvZ20]
Household savings rate	26	6.655 (9.003)	2016	[Sun+22]
The share of Protestants in 1900	76	10.636 (23.858)	1900	[Bar]
1 if Colonized, over a long period of time and with substantial governance participation	76	0.711 (0.457)	n/a	[Sun+22]
Historical prevalence of infectious diseases, mean of standard scores based on 7 diseases	76	0.121 (0.625)	mid-20^{th} c.	[MS10]
Historical prevalence of infectious diseases, mean of standard scores based on 9 diseases	76	0.107 (0.633)	mid-20^{th} c., 2005	[MS10]
Map shapefile:				
1:10m cultural vectors	n/a	n/a	n/a	[Nat]

Table A5: 3SLS regression

	(a1) Patience	(a2) Saved this year	(a3) Combined giving vars.
First stage:			
Linguistic distance to the UK	0.23***		
	(0.06)		
Second stage:			
Patience		1.91***	
		(0.28)	
Third stage:			
Saved this year			1.47***
			(0.35)
Controls	No	No	No
Observations	59	59	59

Note: the table presents standardized 3SLS estimates with clustered standard errors. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A6: Country-pair regressions

	(a1) |ΔWGI|	(a2) |ΔWGI|	(a3) |ΔWGI|	(a4) |ΔWGI|	(a5) |ΔWGI|	(a6) |ΔWGI|
|ΔPatience|	0.22***	0.15***	0.14***	0.14***	0.14***	0.14**
	(0.07)	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)
|ΔHDI|			0.01			-0.01
			(0.02)			(0.02)
|ΔOther preferences averaged|				0.11**		0.09*
				(0.05)		(0.05)
Ancestral distance					0.06**	0.05**
					(0.02)	(0.02)
Country-pair FE	No	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	Yes	Yes	Yes
R^2	0.05	0.28	0.28	0.28	0.29	0.29
Observations	40,620	40,620	40,620	40,620	40,620	40,620
Country pairs	2,850	2,850	2,850	2,850	2,850	2,850
Countries	76	76	76	76	76	76

Note: the table presents the results of standardized dyadic regressions with standard errors (two-way) clustered at both countries. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A7: Baseline cross-country regressions

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI
Patience	0.46***	0.51***	0.62***	0.31**	0.29***	0.38**	0.38*
	(0.11)	(0.12)	(0.12)	(0.15)	(0.10)	(0.18)	(0.20)
$Patience^2$							0.00
							(0.08)
Region FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	No	No	Yes	Yes	Yes	Yes	Yes
Legal origins	No	No	No	Yes	Yes	Yes	Yes
Adherence to religion shares	No	No	No	No	Yes	Yes	Yes
Fractionalization variables	No	No	No	No	Yes	Yes	Yes
Genetic variation	No	No	No	No	Yes	Yes	Yes
Other preferences	No	No	No	No	No	Yes	Yes
R^2	0.22	0.39	0.50	0.63	0.82	0.84	0.84
Countries	76	76	75	75	72	72	72

Note: the table presents standardized OLS estimates with robust standard errors. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A8: Cross-country regressions with extra controls

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI	(a8) WGI	(a9) WGI	(a10) WGI	(a11) WGI
Patience	0.46***	0.43***	0.46***	0.69***	0.67***	0.58***	0.55***	0.41***	0.63***	0.63***	0.56**
	(0.15)	(0.15)	(0.13)	(0.13)	(0.12)	(0.13)	(0.14)	(0.15)	(0.12)	(0.12)	(0.24)
log(Real GDP p. c.)	0.35**										
	(0.17)										
HDI		0.50**									0.91**
		(0.25)									(0.36)
Globalization index			0.43**								-0.21
			(0.19)								(0.33)
Gross national savings				-0.18							-0.16*
				(0.13)							(0.08)
Govt. cons-n spending					-0.23*						-0.15
					(0.12)						(0.18)
log(Total population)						0.29					-0.20
						(0.24)					(0.18)
Democracy index							0.22				0.18
							(0.18)				(0.20)
Corruption perceptions								0.39**			-0.46
								(0.19)			(0.33)
Gini index									0.05		0.13
									(0.18)		(0.18)
Crime (homicide rate)										0.04	-0.04
										(0.11)	(0.11)
Intended altruism											-0.10
											(0.20)
Trust											0.22**
											(0.10)
Risk preferences											0.01
											(0.16)
Positive reciprocity											0.08
											(0.17)
Negative reciprocity											-0.22*
											(0.11)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Legal origins	No	No	No	No	No	No	No	No	No	No	Yes
Adherence to religion shares	No	No	No	No	No	No	No	No	No	No	Yes
Fractionalization variables	No	No	No	No	No	No	No	No	No	No	Yes
Genetic variation	No	No	No	No	No	No	No	No	No	No	Yes
R^2	0.52	0.53	0.54	0.52	0.52	0.51	0.51	0.53	0.50	0.50	0.88
Countries	75	75	75	74	75	75	75	75	75	75	71

Note: the table presents standardized OLS estimates with robust standard errors. The full specification centers around the HDI instead of real GDP p.c. because the effects of the latter become insignificant (p-value = 0.28) after including other controls.* $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Figure A1: Dyadic and cross-country (conditional) plots

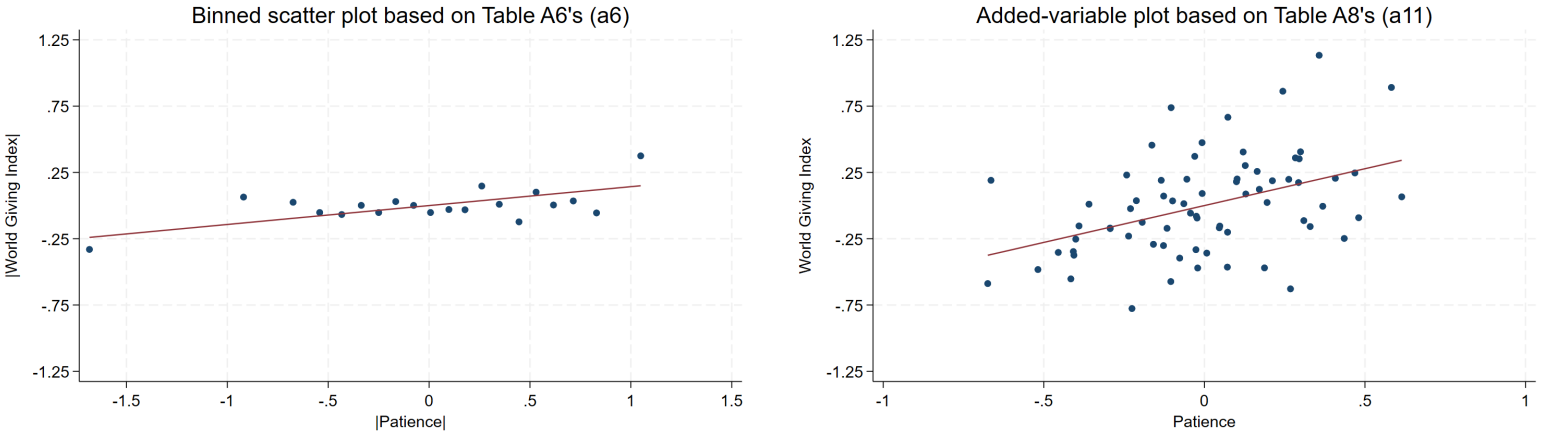

Table A9: Patience and giving: cross-country evidence based on the 2012 - 2022 WGI data

	(a1) |ΔWGI|	(a2) |ΔWGI|	(a3) WGI	(a4) WGI
|ΔPatience|	0.18***	0.12**		
	(0.06)	(0.05)		
Patience			0.38***	0.57**
			(0.11)	(0.27)
|ΔHDI|		-0.01		
		(0.02)		
HDI				0.89**
				(0.41)
Ancestral distance		0.06**		
		(0.02)		
Genetic diversity				0.01
				(0.18)
|Δ∑(Intended altruism, Reciprocities, Risk, Trust)/5|		0.09*		
		(0.05)		
Trust				0.20
				(0.12)
Negative reciprocity				-0.26*
				(0.14)
Country-pair FE	No	Yes	No	No
Year FE	No	Yes	No	No
Additional controls	No	No	No	Yes
R^2	0.03	0.32	0.15	0.85
Observations	28,712	28,712	76	71
Country pairs	2,850	2,850	n/a	n/a
Countries	76	76	76	71

Note: the table presents the results of standardized dyadic and aggregated regressions. For the former, standard errors are two-way clustered at country pairs; while for the latter, they are clustered at the country level. Additional controls account for geography, socio-economic situation, legal and ethnic origins, adherence to religion, fractionalization, and other preferences. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A10: Patience and giving: instrumental variable design based on the 2012 - 2022 WGI data

	(a1) |ΔPatience|	(a2) |ΔPatience|	(a3) Patience	(a4) Patience
First stage:				
|ΔLinguistic distance to the UK|	0.54***	0.71***		
	(0.11)	(0.10)		
Linguistic distance to the UK			0.59***	0.33***
			(0.13)	(0.07)
	|ΔWGI|	|ΔWGI|	WGI	WGI
Second stage:				
|ΔPatience|	0.61***	0.53***		
	(0.13)	(0.13)		
Patience			0.88***	0.90***
			(0.15)	(0.32)
Reduced-form regressions:				
|ΔLinguistic distance to the UK|,	0.33***	0.38***	0.52***	0.29
Linguistic distance to the UK	(0.06)	(0.09)	(0.09)	(0.18)
Standard OLS regressions:				
|ΔPatience|, Patience	0.18***	0.12**	0.38***	0.57*
	(0.06)	(0.05)	(0.11)	(0.29)
Controls and FE	No	Yes	No	Yes
First stage F-statistic	22.58	49.35	22.49	19.40
Montiel Olea and Pflueger test, F-crit. for 10% bias, 10% CI	19.75	19.75	19.75	19.75
Anderson–Rubin test, p-value	0.02	0.09	0.01	0.02
Observations	27,281	27,281	74	70
Countries	74	74	74	70

Note: the table presents standardized OLS and IV estimates with clustered standard errors. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A11: Additional controls for the instrument and outcome decomposition

	(a1) WGI	(a2) Help strangers	(a3) Donate money	(a4) Volunteer time
First stage:				
Linguistic distance from the UK	-0.61**	-0.61**	-0.61**	-0.61**
	(0.12)	(0.12)	(0.12)	(0.12)
Second stage:				
Patience	1.37***	0.07***	0.27***	0.04**
	(0.14)	(0.01)	(0.03)	(0.02)
Region FE	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes
Socio-economic indicators	Yes	Yes	Yes	Yes
Legal origins	Yes	Yes	Yes	Yes
Adherence to religion shares	Yes	Yes	Yes	Yes
Fractionalization variables	Yes	Yes	Yes	Yes
Genetic variation	Yes	Yes	Yes	Yes
Other preferences	Yes	Yes	Yes	Yes
Pre-industrial time to reach the UK	Yes	Yes	Yes	Yes
Blood (types A and B) distance relative to the UK	Yes	Yes	Yes	Yes
Pre-industrial time to reach China	Yes	Yes	Yes	Yes
F-stat. of excl. instruments	25.07	25.07	25.07	25.07
Countries	51	51	51	51

Note: the table presents standardized IV estimates with robust standard errors in parentheses. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A12: Alternative instrument set

	(a1) WGI	(a3) WGI	(a3) WGI	(a4) WGI	(a5) WGI
First stage:					
Linguistic distance	-0.68***	-0.59***	-0.26**	-0.05	
from Sweden	(0.10)	(0.11)	(0.10)	(0.14)	
Linguistic distance				-0.28*	-0.62**
from the UK				(0.16)	(0.23)
(Linguistic distance					-0.11
from the UK)^2					(0.07)
Second stage:					
Patience	0.60***	0.83***	1.06***	0.87***	0.82***
	(0.17)	(0.20)	(0.27)	(0.28)	(0.22)
Region FE	No	Yes	Yes	Yes	Yes
Geographic controls	No	Yes	Yes	Yes	Yes
Socio-economic indicators	No	No	Yes	Yes	Yes
Legal origins	No	No	Yes	Yes	Yes
Adherence to religion shares	No	No	Yes	Yes	Yes
Fractionalization variables	No	No	Yes	Yes	Yes
Genetic variation	No	No	Yes	Yes	Yes
Other preferences	No	No	Yes	Yes	Yes
F-stat. of excl. instruments	46.55	26.57	6.66	6.93	7.22
Over-id Hansen test, p-value				0.22	0.92
Countries	74	74	70	70	70

Note: the table presents standardized IV/2SLS estimates with robust standard errors in parentheses. The linguistic distance to Sweden is chosen as it is the most patient country in the sample, while the UK is in the top 10 patient countries. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A13: Alternative standard errors

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI
Patience	0.54**	0.54***	0.84***	0.84***
	[0.24]	{0.14}	[0.31]	{0.25}
Estimation	OLS	OLS	IV	IV
Region FE	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes
Economic indicators	Yes	Yes	Yes	Yes
Legal origins	Yes	Yes	Yes	Yes
Adherence to religion shares	Yes	Yes	Yes	Yes
Fractionalization variables	Yes	Yes	Yes	Yes
Genetic variation	Yes	Yes	Yes	Yes
Other preferences	Yes	Yes	Yes	Yes
R^2	0.89	0.89		
F-stat. of excl. instruments			14.56	14.56
Countries	71	71	70	70

Note: the table presents standardized OLS and IV estimates with clustered standard errors in square parentheses and spatially corrected standard errors in curly parentheses. The clustering is based on regional location and income level: 76 countries are overall placed into 18 clusters. Standard errors are spatially corrected using longitude and latitude with a distance cutoff of 320.88 kilometers (average internal distance in the sample) * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A14: Accounting for outliers - I

	(a1) WGI	(a2) WGI	(a3) WGI
Patience	0.66***	0.72***	0.63***
	(0.12)	(0.09)	(0.12)
Estimation	RREG	OLS (d $>$ 4/75)	WLS (pop.)
Region FE	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes
(Pseudo) R^2	0.59	0.71	0.50
Countries	75	65	75

Note: the table presents standardized estimates with (robust) standard errors in parentheses. In (a32), the robust regression method is used. In (a33), the OLS estimator is applied to the sample without outliers based on the Cook's distance criterion. In (a34), the WLS estimator is used based on population size as the weighting variable. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A15: Accounting for outliers - II

	(a1) WGI	(a2) WGI	(a3) WGI
Patience	0.51***	0.59***	0.83***
	(0.15)	(0.15)	(0.18)
Estimation	QREG (0.25)	QREG (0.50)	QREG (0.75)
Region FE	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes
Pseudo R^2	0.34	0.36	0.39
Countries	75	75	75

Note: the table presents standardized estimates with robust standard errors in parentheses. In (a35), (a36), and (a37), the quantile regression method at 0.25, 0.50, and 0.75 quintiles respectively is used. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A16: Additional controls I

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI	(a8) WGI
Patience	0.48***	0.42**	0.60***	0.52***	0.60***	0.35**	0.60***	0.44***
	(0.15)	(0.17)	(0.16)	(0.16)	(0.11)	(0.14)	(0.12)	(0.15)
Power distance	-0.02**							
	(0.01)							
Individualism/collectivism		0.02						
		(0.01)						
Masculinity/femininity			-0.01					
			(0.01)					
Uncertainty avoidance				-0.01				
				(0.01)				
Long/short-term					-0.01			
					(0.01)			
Indulgence/restraint						0.02**		
						(0.01)		
Traditional/secular-rational							0.12	
							(0.23)	
Survival/self-expression								0.23
								(0.16)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.66	0.65	0.64	0.63	0.68	0.71	0.62	0.64
Countries	47	47	47	47	60	59	66	66

Note: the table presents OLS estimates with robust standard errors in parentheses. Only outcome and treatment variables are standardized. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A17: Additional controls II

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI
Patience	0.51***	0.55***	0.65***	0.67***	0.60***	0.69***	0.61***
	(0.13)	(0.12)	(0.14)	(0.13)	(0.13)	(0.13)	(0.13)
Property rights	0.01**						
	(0.01)						
Economic freedom		0.02					
		(0.02)					
Subj. institutions quality			0.00				
			(0.01)				
Net savings				-0.02			
				(0.01)			
Subsidies and other transfers					0.01		
					(0.01)		
Education expenditure						-0.07	
						(0.08)	
Health expenditure							0.01
							(0.08)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.53	0.52	0.61	0.52	0.59	0.57	0.50
Countries	73	74	58	73	68	70	75

Note: the table presents OLS estimates with robust standard errors in parentheses. Only outcome and treatment variables are standardized. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A18: Additional controls III

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI
Patience	0.54***	0.58***	0.47***	0.54***	0.62***	0.70***	0.42***
	(0.15)	(0.13)	(0.14)	(0.12)	(0.12)	(0.15)	(0.14)
log(Lights/area)	0.18						
	(0.12)						
log(Population, ages 65+)		0.17					
		(0.14)					
Happiness level			-0.61				
			(0.56)				
Cognitive skills				0.29			
				(0.31)			
Inflation rate					0.00		
					(0.01)		
Deposit interest rate						-0.00	
						(0.01)	
Internet users							0.02*
							(0.01)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.52	0.51	0.61	0.69	0.50	0.45	0.53
Countries	75	75	60	48	75	64	75

Note: the table presents OLS estimates with robust standard errors in parentheses. Only outcome and treatment variables are standardized. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

Table A19: Additional controls IV

	(a1) WGI	(a2) WGI	(a3) WGI	(a4) WGI	(a5) WGI	(a6) WGI	(a7) WGI
Patience	0.41***	0.42***	0.71**	0.40***	0.56***	0.53***	0.49***
	(0.13)	(0.15)	(0.26)	(0.14)	(0.12)	(0.11)	(0.12)
log(Real GDP per capita in 1950)	0.59***						
	(0.17)						
log(Real GDP per capita in 1975)		0.55***					
		(0.20)					
Household savings			-0.01				
			(0.03)				
Protestants in 1900				0.02***			
				(0.01)			
Colonized					-0.40		
					(0.26)		
7 Historical infectious diseases						-1.03***	
						(0.25)	
9 Historical infectious diseases							-0.96***
							(0.27)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.57	0.55	0.84	0.58	0.52	0.60	0.62
Countries	64	68	26	75	75	75	71

Note: the table presents OLS estimates with robust standard errors in parentheses. Only outcome and treatment variables are standardized. * $p < 0.1$ ** $p < 0.05$, *** $p < 0.01$.

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Abstrakt

Proč se lidé zapojují do filantropie? Po sloučení agregovaných údajů z průzkumu Gallup World Poll za období 2006 až 2022 s údaji z průzkumu Global Preferences Survey ukazuji, že trpělivější lidé častěji darují peníze, pomáhají cizímu člověku a stávají se dobrovolníky. Pomocí regresí založených na heterogenitě států, údajů European Values Study a průzkumu World Values Survey z let 1995–2022 zjišťuji pozitivní vztah mezi spořením a členstvím v charitativní organizaci. Používám lingvistické kořeny postindustriálních časových preferencí jako instrument, a ověřuji, že efekty dlouhodobé charitativní orientace lze interpretovat jako kauzální.

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